

Amendments to the Claims

Claims 1 through 26 previously cancelled

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27. (currently amended) A method of delivering a therapeutic agent to CD30<sup>+</sup> malignant cells, comprising contacting said cells with a conjugate comprising one or more therapeutic agents attached to a soluble CD30 ligand (CD30-L) polypeptide, wherein ~~said soluble CD30-L polypeptide is capable of binding a CD30 polypeptide consisting of amino acids 19-390 of SEQ ID NO:1, and further wherein~~ the amino acid sequence of said CD30-L is at least 90% identical to amino acids 49-220 of SEQ ID NO:19 or amino acids 47-215 of SEQ ID NO:23, and further wherein said soluble CD30-L polypeptide is capable of binding a CD30 polypeptide consisting of amino acids 19 through 390 of SEQ ID NO:2.

28. (currently amended) A method of delivering a therapeutic agent to CD30<sup>+</sup> malignant cells, comprising contacting said cells with a conjugate comprising one or more therapeutic agents attached to a soluble CD30-L polypeptide, wherein ~~said soluble CD30-L polypeptide is capable of binding a CD30 polypeptide consisting of amino acids 19-390 of SEQ ID NO:1 and further wherein~~ said soluble CD30-L is encoded by a DNA that is capable of hybridizing under conditions of moderate stringency to the nucleotide sequence of SEQ ID NO:22, wherein said hybridization conditions comprise hybridizing at 55° in 5 X SSC, and further wherein said soluble CD30-L polypeptide is capable of binding a CD30 polypeptide consisting of amino acids 19 through 390 of SEQ ID NO:2.

29. (previously amended) A method according to claim 27, wherein said conjugate is administered in an effective amount to a human afflicted with said malignant cells.

30. A method according to claim 29, wherein said cells are CD30<sup>+</sup> lymphoma cells.

31. Previously cancelled

32. (previously amended) A method according to claim 27, wherein said soluble CD30-L polypeptide is in the form of an oligomer comprising two or more soluble CD30-L polypeptides, wherein the soluble CD30-L polypeptides are each selected from the group consisting of:

- a) amino acids 49-220 of SEQ ID NO:19; and  
b) amino acids z-215 of SEQ ID NO:23, wherein z is amino acid 44, 45, 46 or 47 of SEQ ID NO:23.

33. A method according to claim 32, wherein said oligomer comprises three CD30-L polypeptides.

Claims 34 through 37 previously cancelled.

38. A method according to claim 27, wherein said cells are CD30<sup>+</sup> lymphoma cells.

39. A method according to claim 28, wherein said cells are CD30<sup>+</sup> lymphoma cells.

40. A method according to claim 32, wherein said cells are CD30<sup>+</sup> lymphoma cells.

41. Previously cancelled

E2 42. (currently amended) A method according to claim 36, wherein said cells are CD30<sup>+</sup> lymphoma cells.

43. A method according to claim 28, wherein said cells are CD30<sup>+</sup> Hodgkin's Disease cells.

44. Cancelled

E3 45. (currently amended) A method according to claim 36, wherein said cells are CD30<sup>+</sup> Hodgkin's Disease cells.

Claims 46 though 49 previously cancelled.

50. A method according to claim 28, wherein the therapeutic agent is selected from the group consisting of mechlorethamine, procarbazine, prednisone, dacarbazine, a nitrogen mustard, an intercalating agent, an antimetabolite, a radionuclide, a vinca alkaloid, an antibiotic and a toxin.

51. A method according to claim 50, wherein the therapeutic agent is a nitrogen mustard, and the nitrogen mustard is selected from the group consisting of L-phenylalanine nitrogen mustard and cyclophosphamide.

52. A method according to claim 50, wherein the therapeutic agent is an intercalating agent.

53. A method according to claim 52, wherein the intercalating agent is cis-diaminodichloroplatinum.

54. A method according to claim 50, wherein the therapeutic agent is an antimetabolite.

55. A method according to claim 54, wherein the antimetabolite is 5-fluorouracil.

56. A method according to claim 50, wherein the therapeutic agent is a vinca alkaloid.

57. A method according to claim 56, wherein the vinca alkaloid is vincristine or vinblastine.

58. A method according to claim 50, wherein the therapeutic agent is an antibiotic.

59. A method according to claim 58, wherein the antibiotic is selected from the group consisting of calicheamycin, bleomycin, doxorubicin and daunorubicin.

60. A method according to claim 59, wherein the antibiotic is calicheamycin.

61. A method according to claim 50, wherein the therapeutic agent is a toxin.

62. (previously amended) A method according to claim 61, wherein the toxin is selected from the group consisting of ricin, abrin, saporin toxin, diphtheria toxin, *Pseudomonas aeruginosa* exotoxin A, ribosomal inactivating proteins and a mycotoxin.

63. A method according to claim 62, wherein the toxin is a mycotoxin.

64. A method according to claim 63, wherein the mycotoxin is a trichothecene.

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65. A method according to claim 50, wherein the therapeutic agent is a radionuclide.

66. A method according to claim 65, wherein the radionuclide is selected from the group consisting of  $^{123}\text{I}$ ,  $^{131}\text{I}$ ,  $^{99\text{m}}\text{Tc}$ ,  $^{111}\text{In}$  and  $^{76}\text{Br}$ .

67. Previously cancelled

68. (currently amended) A method according to claim 67, wherein the soluble fragment of human CD30-L is fused with a human IgG1 Fc region.

69. (previously amended) A method according to claim 50, wherein the CD30-L polypeptide is in the form of an oligomer comprising two or more CD30-L polypeptides, wherein the CD30-L polypeptides are each selected from the group consisting of:

- a) the murine CD30-L of SEQ ID NO:6;
- b) the murine CD30-L of SEQ ID NO:19;
- c) the human CD30-L of SEQ ID NO:8;
- d) the human CD30-L of SEQ ID NO:23; and
- e) a fragment of the CD30-L of (a), (b), (c), or (d), wherein said fragment binds CD30.

70. A method according to claim 62, wherein the toxin is saporin toxin.